APPLE COMPUTER

professional solutions

An Information Service For The Professional

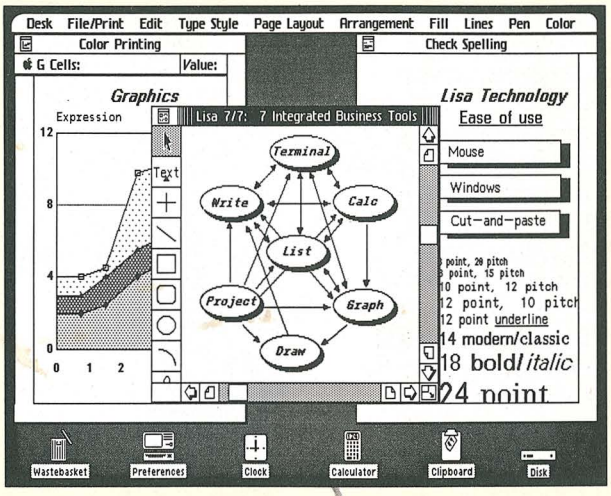
Volume 3 No. 3

Lisa 7/7 Integrated Business Tools for the Personal Computer

In the dark ages of the software industry, before the concept of program integration, programmers with different mindsets created extremely useful business tools. In order to take advantage of these tools, users willingly learned complicated commands and various formats for entering information.

The hours necessary to learn one or two software packages represented a considerable time investment, however. And users sometimes got lost in the sequence of slashes and abbreviations.

When menus were introduced, the learning process was simplified. Nevertheless, it was still necessary to insert identical information into two or more programs to be interpreted for different purposes.



A graphics program and a spreadsheet, for example, might require exactly the same data, but the user had to type it twice. If the two applications had radically different sets of commands, the user had to be familiar with both and if the programs weren't used regularly, their rules were easily forgotten.

Integrated Software Helps

With the advent of integrated software, however, users only have to learn one set of commands. Moreover, the same data can be quickly transferred from one application to another without having to be re-entered.

The same business tools have become far easier to use, and many users are breathing a deep sigh of relief.

Lisa 7/7: A Step Further

Lisa 7/7 software takes integration a step further, and provides practical innovation for the business user. It does this by making full use of Lisa Technology, which sets a new standard for ease of use in the personal computer industry.

With its pull-down menus, mouse, windows, and familiar objects on the desktop, Lisa Technology allows users of Lisa applications to relate intuitively to the computer.

Now Lisa Technology has been expanded in Lisa 7/7—a collection of seven original Lisa applications in one integrated package. Combining the advantages of the Lisa interface with software integration has resulted in an office productivity tool of unequaled accessibility.

Moreover, each of the seven component programs has been enhanced for the 7/7.

- *LisaProject,* a tool for managing complex projects, plots critical project paths and tracks resource allocations. The 7/7 version also performs job-cost calculations.

(continued on page 12)

In This Issue:

512K Expands Macintosh's Capabilities

The Macintosh 512K can handle very large business tasks. With four times the memory of the 128K Macintosh, the Macintosh 512K offers far more capacity, resulting in faster performance. The increase in memory also allows users to create longer documents, larger spreadsheet models, and larger charts and diagrams.

For example, the 512K Macintosh can work with 50 percent larger Multiplan™ spreadsheet models, 8 times the number of MacWrite pages, and 10 times the number of MacProject tasks.

The Macintosh 512K will run any software written for the Macintosh 128K. It will also run the more powerful business software soon to be released by leading software vendors

(continued on page 12)

Identifying Investments with an Apple Personal Computer

By Ian W. Thomson

The work day begins early for Institutional Bond Sales at the San Francisco office of Kidder, Peabody & Company, Inc. By 6 A.M., Joe Daher, vice president and one of Kidder's top institutional salespeople, has identified an arbitrage* opportunity for an investment advisory client.

"This should be worth between $50,000 and $75,000 to my client within the next week," Daher says, and with an emphatic "Done!" the transaction is complete—$20 million in corporate bonds are traded between Daher's client and Kidder's New York trading desk.

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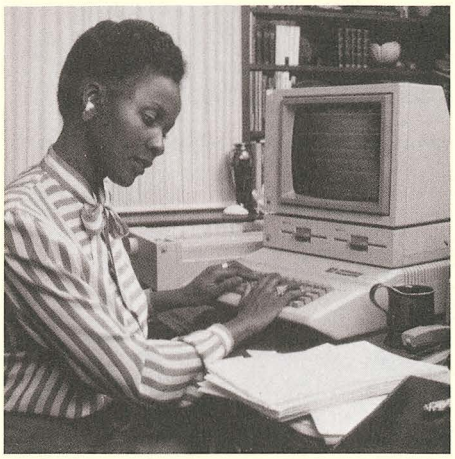


Microcomputers play an important role at Kidder Peabody. They provide rapid access to concise information at the desktop with little or no downtime—and all at a cost-effective price.

Kidder's Institutional Sales personnel are all required to have computer skills, and each salesperson is equipped on the job with an Apple *//e*, Telerate, ADP Financial Services, and access to the company's proprietary Tandem-based system in New York City.

The Operations staff at Kidder has the same computer support. They use their computers for administration management and for updating portfolios. Currently they are also testing AppleWorks for various other applications.

The Systems Group links Operations and Sales through computer support and training. Mike Berman, director of fixed income systems development, has designed a sophisticated group of programs for Apple II Plus and Apple *//e* systems. These programs are designed to give salespeople the basic tools of their trade.

Some 20 of Berman's programs are now available for Cash and Futures Sales personnel. They include calculators for a wide range of securities and swap portfolios. For such functions as yield curve futures, there are calculators for GNMA CDR rate of return, GNMA cash futures basis, implied repo rate for T-bills, and accounting packages for P/L on cash versus futures positions.

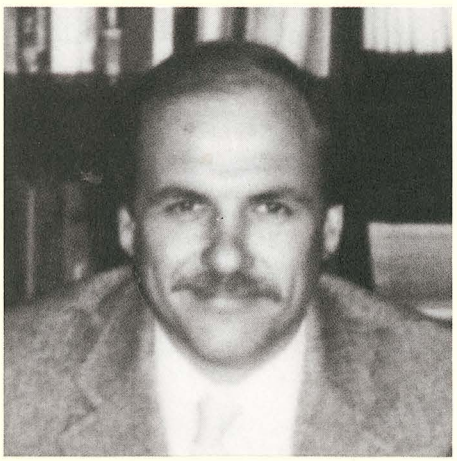
These programs have become very popular with Kidder's clients. In fact, the company is creating a software library that will be available on a restricted basis to selected clients through a contractual arrangement. This gives sales personnel a new leverage point in contacts with potential clients.

Based on Berman's original programs, a nationwide computer network with a large database of fixed-income securities attempts to give Kidder a competitive advantage over other brokers. So far, the network has met with great success.

New projects include an intelligent terminal, most likely an Apple *//c* or a Macintosh, that can access Kidder's database in New York City as well as run applications to process the information. This is not merely terminal emulation, but the combined power of mainframe database and state-of-the-art microcomputer application software.

At Kidder Peabody, microcomputers were initially viewed with a high degree of skepticism, but now you couldn't take them away. The Apple systems have been indispensable in identifying exceptional investment opportunities within an extremely dynamic and complex bond market.

*The purchase of securities on one market for immediate resale on another in order to profit from a price discrepancy.



About the author:
Ian Thomson, a senior systems analyst with Kidder, Peabody & Co., Inc., specializes in fixed-income applications and systems design. Educated at Fordham University and DeAnza College, Ian has immersed himself in computer science. He has his own firm, Micro Financial Systems in Menlo Park, California, which develops and licenses software for the investment community.

Macintosh Friendly with Dow Jones

By Bill Dunn

We at Dow Jones have had the luxury—and the obligation—of using and evaluating most of the personal computers developed in the past seven years. We've had to learn to understand the buzz words since we're using personal computers as terminals for our information services to the business and general community.

Our problem—and we think it's a universal one—has been that we've spent too much time learning to understand RAMs, ROMs, and EPROMS, and too little time demanding tools that average people could use easily.

Personally, I feel that the Macintosh represents a new standard for a useful tool that I can employ in everyday circumstances. (I'm afraid to call it a personal computer, since I might again feel the compulsion to understand the innards.)

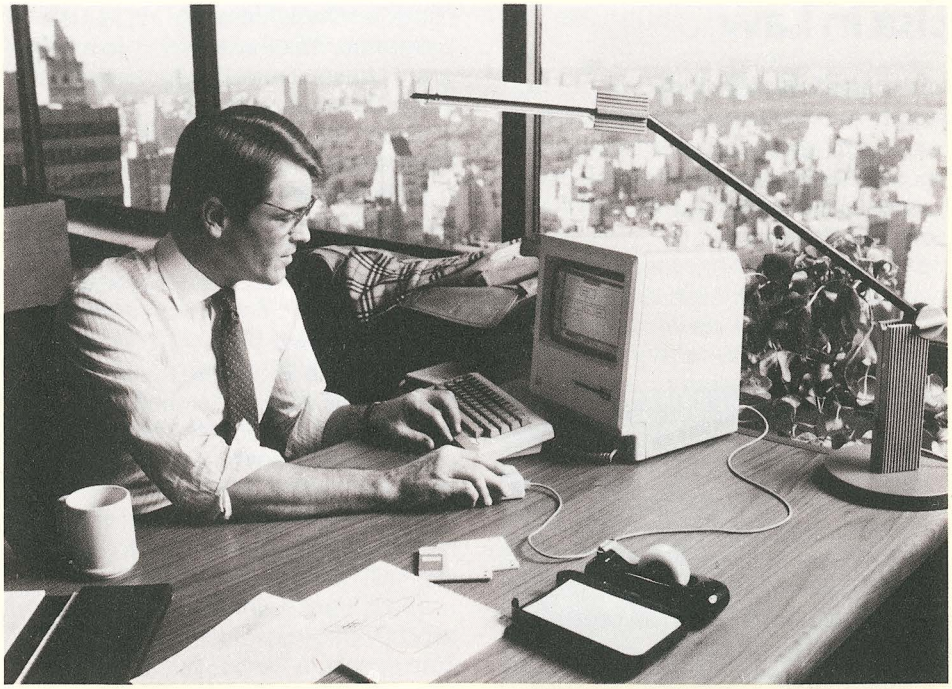
It's difficult to convey the feeling of confidence and pride that I had when I used my Macintosh to write a congratulatory letter to Steve Jobs and John Sculley.

To be able to write a letter on a new computer without opening a manual was a minor miracle. To be able to create a personal graphic and get it into the body of that letter was second only to walking on the moon. And since the letter was created at 43,000 feet in a Gulfstream III, the whole experience was probably a first.

Engineers and designers at Apple should get more recognition for their advances in the art of software, hardware, firmware... (oops, there I go again, backsliding). It takes extremely sophisticated, complex programming to make it possible for a technological dunce like me to use computers.

I use the Macintosh every day. I've had it for about eight months—long enough for it to get thrown on the pile of other personal computers that I've used and discarded. But it's still on my desk.

Why? Because of MacWrite. I'm actually writing my own memos for internal distribution. (When I get a laser printer, I'll do them for outsiders, too).



It's fun to change type faces and sizes and sign only my first name. It's fun to hear people groan when they are in London and they get a long letter written in the London font.

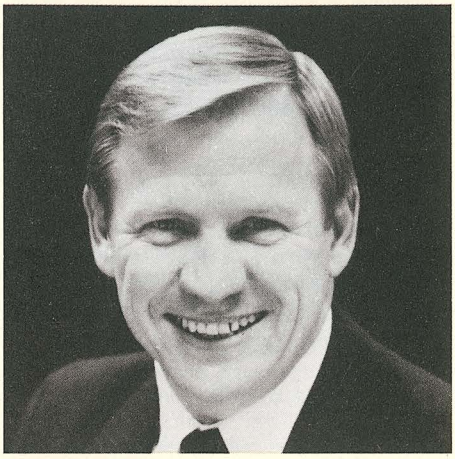
While the memos may get groans, they get read. I was never sure of that before.

The Macintosh is the first machine that we can truly say is making the connection and interaction with data services easier and more friendly. We developed Dow Jones Straight Talk™ for the Macintosh, and it's now available for purchase. As we bring revisions to the marketplace, they'll be based on the truly wonderful characteristics of the Macintosh.

Maybe Macintosh provides some lessons for all of us on the other side of the technology fence. Maybe we should be more demanding and not be pushed and bullied into learning—and trying to understand—all of the new lingo.

Maybe we should be more aggressive in saying, "Ain't good enuf," or "Prove it to me, or "I don't see any use for it."

The Macintosh certainly took the first step toward accepting that challenge. And my proof that it was the right step is that I'm still using it.



About the author:
William L. Dunn, has been Vice President and General Manager of Dow Jones & Company, Inc., since November 1977. In January 1980 he was named President/Publisher of the Information Services Group and President of the Operating Services Group. He joined Dow Jones as a Production Assistant in Chicago after receiving his B.A. in Economics from Drake University in Iowa.

Lisa in Law

By James M. Burger, Esq.

When I first started practicing law, the most advanced electronic device on my desk was a large four-function calculator. Now I'm in love with my Lisa personal computer.

Already performing yeoman service with LisaWrite, LisaCalc, LisaList, and LisaDraw, my Lisa will soon be even more useful. When my modem arrives, I expect to start using LisaTerminal and I also look forward to using LisaProject.

One of Lisa's outstanding qualities is its programs' ease of use. I have not used a single tutorial or read one manual cover to cover. A typical Type-A Washington attorney, I have little time to plow through a several-hundred-page manual.

Before I got my Lisa, I ran an extensive spreadsheet on the Lisa's leading competitor. It took me hours to learn enough to set up and run a cash flow analysis. Each time I wanted a printout it took a considerable amount of time to set it up. The Lisa's simplicity is like a breath of fresh air.

Given my travel schedule and the varying nature of my work, my "computer time" varies. If I haven't worked with a spreadsheet for a couple of weeks, I don't want to have to sit down and take a refresher course. Because of the common elements in the Lisa programs, it's easy to return to a program I haven't used lately; I'm in shape from using the others.

I use LisaWrite more than any of the other applications. I find it ideal for draft letters and papers, personal letters, and interoffice memos. (Because I like to keep my secretary informed, and because I don't have a letter-quality printer, I don't use it for final business letters.)

One of the folders on my ProFile™ hard disk is labeled "stationery." It contains a number of forms that I have created with LisaWrite and made into stationery pads: a memo form, a draft pad, personal letterhead, a new client form, and a form for check requisitions.

From LisaDraw I have created a trip report form; from LisaList, monthly time sheets, a "to do" list, and a telephone/address list. Before a trip, I print the telephone/address list, which gives me a handy version of my Rolodex to take with me wherever I go.

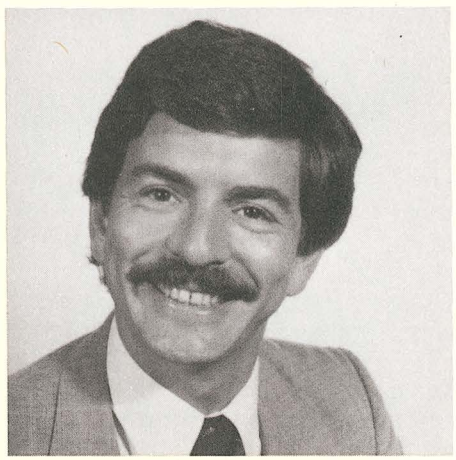
I have recently mustered my courage and begun to use LisaCalc, LisaGraph, and LisaDraw to prepare tables, charts, graphs, maps, and other exhibits for use in legal proceedings. In preparation for a labor arbitration, the Lisa worked overtime preparing comparative graphs that analyzed wage rates at competing companies.

The 25 graphs demonstrated to the arbitrator that my client's wage offer was well above the industry average. My client and the arbitrator were impressed. The other side was disturbed.

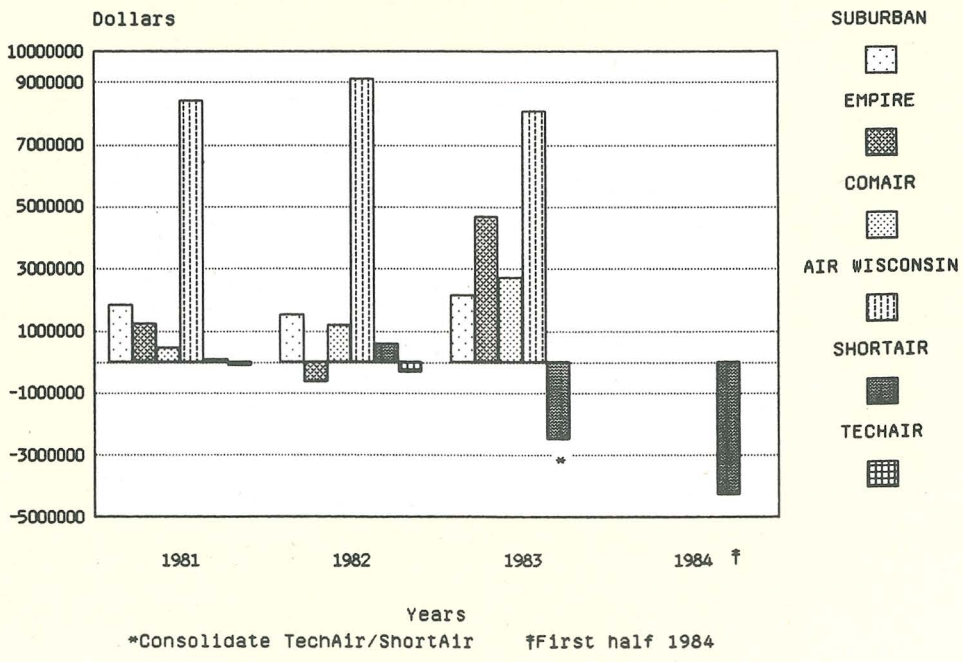
I'd like to attribute the favorable result to my persuasive legal talents, but the facts—and the dramatic way in which the Lisa displayed them—were no doubt instrumental.

I am not completely uncritical of the Lisa. I would like more software, and am anxiously awaiting some of the new Macintosh programs. I would also like the Lisa to be faster. (I don't mean faster than the competition—I suspect the Lisa is faster.) But because the Lisa interface is so intuitive, I expect everything to happen as fast as I can work the mouse and the keyboard.

In addition, I would like the cursor movements and other word processing functions to be accessible from the keyboard. All things considered, though, I wouldn't trade my Lisa for any other personal computer. It has improved my law practice.



About the author:
Jim Burger, a partner in the Washington, DC, law firm of Burger & Kendall, received his BA, MA and JD at New York University. Jim practices regulatory, commercial and corporate law for high technology clients including software companies and aviation clients. Jim lectures for various groups on intellectual property law and computer software. He is General Counsel to Washington Apple Pi, the largest nonprofit users group in the U.S., and owns an Apple II+, Lisa and Macintosh.



Advertising with an Apple

By Roger C. Parker

It's hard to believe that I ever operated an advertising and consulting business without the benefit of my Apple II Plus personal computer. Within a short time, my Apple became the focus of almost every aspect of my work, speeding up even the most complicated tasks.

Here are some of the ways my Apple system increased my business productivity.

Media Plans

If planning is the essence of successful advertising programs, VisiCalc® is the essence of planning.

After getting my Apple and mastering VisiCalc, I created a template that gave me the ability to prepare complicated media plans quickly. These plans accurately forecasted month-by-month expenses, and kept me—and my clients—informed of approaching deadlines.

I had to add an extra memory board to handle large budgets, but this was a small price to pay for the ability to see a year's advertising at a glance and to modify it quickly according to the client's desires.

Profit and Loss Projections

As a writer, I've always disliked working with numbers or a calculator. But VisiCalc was fun. With my Apple II Plus and VisiCalc, I became a better businessman. I developed a profit and loss template that helped me see my business as a whole and better understand my true overhead. I set more realistic hourly charges and re-evaluated employee contributions to productivity.

In addition, with my Profit and Loss template in hand, I had a new service to sell, which increased my value as a consultant.

Proposals

My Apple II Plus with VisiCalc quickly paid for itself by speeding up my proposal writing. I created a Project Planner template that contained hourly charges for project expenses such as copywriting, design, typesetting, layout, photography, printing, and postage. By simply plugging in estimated charges, I could prepare accurate price quotes. This permitted me to write more proposals and to do them in far less time.

Word Processing

Screenwriter II was the first word processing program I bought for the Apple. It took the sting out of client revisions. Being able to provide typesetters with clean copy also eased the typesetting process. The result: reduced charges and fewer errors.

My Apple system and Screenwriter further increased my productivity by permitting me to set up a database of frequently used product descriptions. This is because much of my business is devoted to preparing newsletters for stereo retailers.

Entire issues could often be constructed by simply plugging in and rearranging previously written sentences and paragraphs.

Screenwriter also improved the appearance of my writing, increasing the visual credibility of proposals and business letters.

Surveys

By stretching its capabilities a bit, I was able to develop a VisiCalc Customer Survey template that permitted me to analyze the media preferences of my clients' customers.

My clients were happy with the survey. And with the profits I made, I was able to purchase a more sophisticated database program, VersaForm™, and offer a new survey with more in-depth analysis.

Management

With State Of The Art's Professional Time and Billing program, I was able to prepare invoices and keep track of client payments. I was also able to analyze client-project profitability.

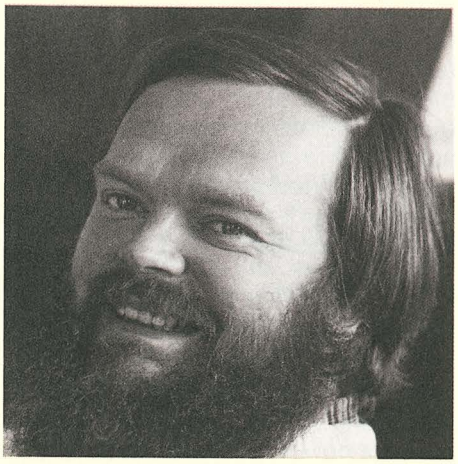
The same program facilitated the preparation of invoices and tracking of client payments. More importantly, however, it permitted detailed client and project-profitability analysis. Also, labor costs and outside expenses could be assigned to the appropriate client and project.

The Time and Billing program, integrated with State Of The Art's General Ledger, resulted in tighter financial controls and lower bills from our accountant. Because this program can also prepare address labels, we found it easier to keep in touch with past clients through direct-mail newsletters and other announcements.

In Conclusion

Looking back, it's interesting to note how quickly one becomes used to having a computer available. At this point, I can't conceive of writing an article or an announcement on a typewriter. Neither can I conceive of preparing a media plan by hand, using lined paper, a pencil, and a calculator.

Computers are habit forming, but the habit definitely saves time and increases profits.



About the author:
Roger C. Parker is a writer and advertising consultant to the consumer electronics industry. Roger's articles on advertising appear frequently in publications such as *Audio Times* and *Computer Retailing*. Roger has also conducted Retail Advertising Seminars for manufacturers such as Apple Computer, Yamaha Audio, Kyocera International, Bang & Olufsen, and others. A frequent reviewer of computer hardware, software, and books, Roger can be reached at 2464 33rd Avenue West, Suite 139, Seattle, WA 98199, or by phone at 206-281-7655.

S & L Makes Financial Aid for College a S.N.A.P.

By David T. Waldron

In today's extremely competitive financial services industries, banking institutions are looking at new ways to market their products and services.

Commercial Federal Savings and Loan, Nebraska's largest savings and loan, promotes a financial planning program for parents of college-bound students. At the same time it provides a needed community service.

As part of the promotion, Commercial Federal has donated software that

(continued on page 6)

S.N.A.P.
(continued from page 5)
allows families to plan their budgets for meeting college costs. Titled the Student Need Advisor Program (S.N.A.P.), the software runs on Apple computers, which are in all of the state's high schools.

This means that every high school in the state can now provide college-bound students with the opportunity to assess their eligibility for federal financial aid.

S.N.A.P. disks were purchased from Advanced Process Laboratories (APL), an Omaha software development firm that designed them as a guidance planning tool for high schools. Already implemented in Florida and Minnesota, the program has been applauded by both schools and lending institutions.

How it Works

Based on APL's federally approved need-analysis system, the S.N.A.P. program calculates a family contribution figure, determines the financial effect of potential awards, and displays the financial need amount for the family.

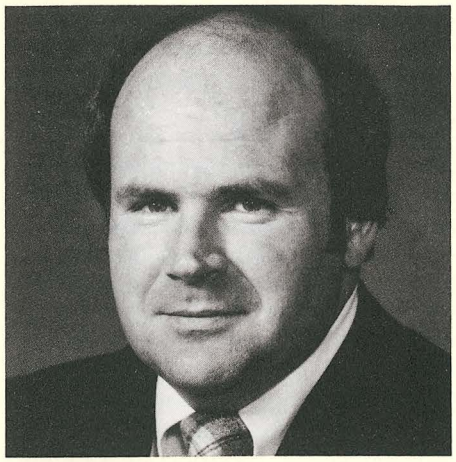
S.N.A.P. offers the flexibility to estimate need or calculate specific eligibility. It then compares the resulting figures with the costs of colleges.

Using a computerized letter included in the program, students may send their need figures and self-reported test scores to colleges of their choice. S.N.A.P. includes a dictionary of aid terms, addresses of state loan and scholarship agencies, and a planning-form worksheet for students and their parents.

In the past, the process of forms, letters, and waiting took months. Now, sophomores and juniors can access information about a variety of colleges in a matter of minutes. They are further provided with a realistic look at their own financial picture in the context of their families' needs.

Commercial Federal has agreed to supply the disks to all Nebraska high schools for two years. Students will be able to use S.N.A.P. through the 1985 college planning process.

"We are in the financial services industry, and we know that costs for a college education are soaring," states John Laughlin, First Vice President at Commercial Federal. "We hope that through this program, Commercial Federal will help many Nebraska students and their parents with financial planning for college."



About the author:
David T. Waldron is recognized as an independent microcomputer consultant. He founded Software Marketing Associates in 1983 and is currently president of the software consulting and marketing company. He is also vice president of Advanced Process Laboratories, a software development company in Omaha, Nebraska. From 1980 to May, 1983 he served as Chairman of the Board of FINANCIAL SYSTEMS INC. (FSI) in Kearney, Nebraska. David has over fifteen years of computer software and marketing experience, specializing in the financial and agricultural industries. David founded FSI in 1975 providing computer systems and a source of software for the financial market.

Using Microcomputers in Auditing

By John C. Gazlay

Extensive use of microcomputers—so common in many large organizations—is not common among internal auditors. A recent survey of internal audit departments in the San Francisco Bay Area revealed only one department that uses microcomputers extensively in its activities.

Several others were experimenting with microcomputers for planning, budgeting, or word processing, but not for the nonadministrative audit functions.

This contrasts greatly with external audit firms, where the goal is a microcomputer for every auditor within a very few years.

For those internal auditors, then, who are reluctant to use microcomputers, here is an outline of the functions that microcomputers can perform, all of which make auditing more efficient and effective.

Auditing Functions and Applications

Microcomputers can be used in these audit functions: planning, administration, analysis, testing, documentation, reporting, and assistance to external audit.

Application software relevant to these auditing functions include spreadsheet, word processing, database management, and data communications packages. We'll look at auditing functions in terms of these applications.

Spreadsheet software can facilitate the preparation of any columnar audit analysis, as well as the comparison of historical and location-by-location data.

Word processing software can be used to create, modify, archive, and retrieve virtually any document, including standard audit reports, audit narratives or work papers, and audit programs listing the step-by-step procedures for an auditor to follow.

Database management software can be used by auditors to produce personnel rosters listing education, certifications, salary, address, and other pertinent information. Another possible use is to maintain a file of audit entities for scheduling recurring audits based on transaction volume, number of personnel, prior audit findings, and so on.

Data communications software can assist the auditor in transferring data quickly between remote locations. It can also extract data of audit interest from a mainframe computer for testing by the audit team. In addition, it can be used to gather time and expense information from field-audit teams for consolidation and monitoring in the home office.

Data communications software is often used to transfer information between otherwise incompatible computers. Thus, a report draft developed on a microcomputer could be transferred electronically to the home office's word processing system for final editing, printing, and distribution.

Awareness: An Intangible Benefit

In addition to the explicit functions that microcomputers can perform to make auditing more efficient and effective, there is an intangible benefit: awareness of the productivity, control, security, and decision-making implications of microcomputers.

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ognize patterns, and effectively communicate those patterns to the Court. The Lisa personal computer sat at counsel table with the farmers. It was a symbol, a weapon, and a tool.

Background

By the time I got my Lisa computer at the end of December, I was desperate to get my hands on a machine that would let me manipulate data and get a feeling of control over the information. Prior to that time, our staff had invested thousands of hours meticulously coding over 4,000 documents

ering them into a mainframe
er. Although the printouts were
the process was extremely
d unforgiving. I found signifi-
w patterns beginning to
. However, it was frustrating
task of reprogramming and
ing was arduous and time-
ning, and that it required the
specialists.
usband had mastered our
e computer after months of
ed expletives from the base-
knew that kind of time invest-
as not for me. Already putting
our weeks of preparation for
, I had neither the time nor the
e to learn a computer lan-
More than that, I needed a
I could count on under the
e of trial since I was sched-
examine a number of wit-
at the same time I was track-
evidence.

al Begins

ime the trial began in March,
worked out a number of appli-
which proved to be highly
n a trial setting. One of the first
as to outline a "battle plan" for
e number of tasks the office
d to perform in preparation for
uring the course of seven years
arch, the file for this case had
ed gargantuan proportions. No
our building was large enough
mmodate both the raw docu-
and the staff members working
ous assignments.
t chunks of time were devoured
out who had what part of the
ere they were, and how soon
uld be finished with it. With
ject we easily produced a trial
ation chart which was posted in
tral file headquarters we affec-
y dubbed "The War Room". Up-
and adjusting for changes was
simple.

With the staff on track, I sat down with my Lisa to figure out my most difficult problem: the brinefield. There was definite trouble in our adversaries' brinefield; but how could I explain it? The brinefield was like an old graveyard with some of the markers missing. How could I explain what was buried beneath the surface? I was haunted by the prospect.

There were at least 85 separate brinewells with histories that ranged from 70 years to 6 months. I listed these separate wells in the left-hand column of **LisaList**. In the next 4 columns, I placed the data which had recently been supplied to the state by the sale plant. Next, I started combing through our evidence for all information that related to a particular well, and cross-correlated it to the exhibit number. The result was a 13-page complete chart of the brinefield.

On a second list, I compiled a summary of particular types of problems and cross-correlated it to the first. These lists became key tools for understanding the history and significance of brinefield events. The brinefield printout also became an exhibit—a formidable weapon against the salt company witnesses when it became our turn to cross-examine.

LisaList provided an outstanding listing of exhibits that we provided directly to the Court Clerk. By simply matching the headings on the blank forms provided by the Court, we were able to print out an official exhibit list which was updated daily. These lists were used by the Court Clerk to track whether certain exhibits had been identified, offered, or admitted on a particular day of trial.

Usually such lists become quite cluttered with the handwritten notes that accumulate during a two-month trial. By inputting the handwritten additions, we were able to maintain a clean copy that was highly legible.

Not only did this list match the form required by the Court, but it also offered the advantage of sorting by any column heading. As the trial progressed, we needed to find which exhibits had been admitted by particular witnesses. The computer sorted this in seconds.

LisaProject gave us an easy method of rescheduling witnesses. Usually a lawyer can only guess as to what day a particular witness will reach the witness stand. Rescheduling used to be an arduous task. With **LisaProject,** we just changed one date and the software projected the new dates for the remaining witnesses. Quick phone calls did the rest.

LisaGraph gave us effective graphs, ranging from bar charts on monitor well samples to pie charts showing earnings compared to fines. Damages spreadsheets were a natural use for **LisaCalc.** If we had only had the Lisa earlier, we could have saved hundreds of hours already spent in drawing other graphs.

(continued on page 8)

S.N.A.P.
(continued from page 5)

allows families to plan their budgets for meeting college costs. Titled the Student Need Advisor Program (S.N.A.P.), the software runs on Apple computers, which are in all of the state's high schools.

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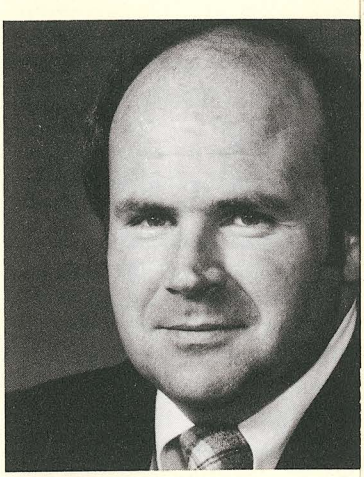

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David T. Waldron is recognized as an independent microcomputer consulta founded Software Marketing Associat 1983 and is currently president of the s consulting and marketing company. H vice president of Advanced Process Laboratories, a software development company in Omaha, Nebraska. From May, 1983 he served as Chairman of th of FINANCIAL SYSTEMS INC. (FSI) in Nebraska. David has over fifteen years computer software and marketing exp specializing in the financial and agricu industries. David founded FSI in 1975 computer systems and a source of sof the financial market.

Using Microcomp in Auditing

By John C. Gazlay

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There were at least 85 separate brinewells with histories that ranged from 70 years to 6 months. I listed these separate wells in the left-hand column of **LisaList**. In the next 4 columns, I placed the data which had recently been supplied to the state by the sale plant. Next, I started combing through our evidence for all information that related to a particular well, and cross-correlated it to the exhibit number. The result was a 13-page complete chart of the brinefield.

On a second list, I compiled a summary of particular types of problems and cross-correlated it to the first. These lists became key tools for understanding the history and significance of brinefield events. The brinefield printout also became an exhibit—a formidable weapon against the salt company witnesses when it became our turn to cross-examine.

LisaList provided an outstanding listing of exhibits that we provided directly to the Court Clerk. By simply matching the headings on the blank forms provided by the Court, we were able to print out an official exhibit list which was updated daily. These lists were used by the Court Clerk to track whether certain exhibits had been identified, offered, or admitted on a particular day of trial.

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(continued on page 8)

S.N.A.P.
(continued from page 5)
allows families to plan their budgets for meeting college costs. Titled the Student Need Advisor Program (S.N.A.P.), the software runs on Apple computers, which are in all of the state's high schools.

This means that every high school in the state can now provide college-bound students with the opportunity to assess their eligibility for federal financial aid.

S.N.A.P. disks were purchased from Advanced Process Laboratories (APL), an Omaha software development firm that designed them as a guidance planning tool for high schools. Already implemented in Florida and Minnesota, the program has been applauded by both schools and lending institutions.

How it Works

Based on APL's federally approved need-analysis system, the S.N.A.P. program calculates a family contribution figure, determines the financial effect of potential awards, and displays the financial need amount for the family.

S.N.A.P. offers the flexibility to estimate need or calculate specific eligibility. It then compares the resulting figures with the costs of colleges.

Using a computerized letter included in the program, students may send their need figures and self-reported test scores to colleges of their choice. S.N.A.P. includes a dictionary of aid terms, addresses of state loan and scholarship agencies, and a planning-form worksheet for students and their parents.

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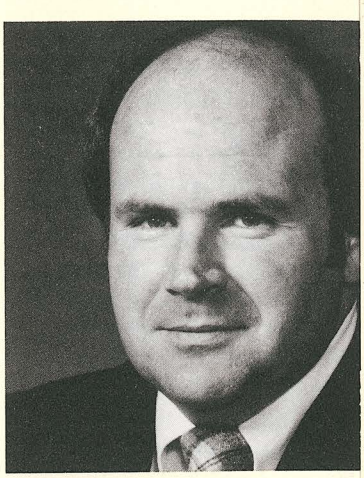

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The Editor
Professional Solutions
20525 Mariani Avenue 23-DS
Cupertino, CA 95014

Gaining this awareness is an invaluable learning experience. By using microcomputers, auditors become more aware of the impact that microcomputers have on auditing organizations.

About the author:
John (Jack) C. Gazlay is a Partner and the West Region Director of Computer Auditing in the San Francisco Office of Arthur Young & Company. As one of Arthur Young's senior computer auditors, he has had extensive electronic data processing experience. He currently serves on EDP Committees for the American Institute and The California Society of CPAs.

Lisa In The Courtroom

By Deborah Carney, J.D.

A symbolic duel took place this spring in a Federal Courthouse. On one side of the courtroom, sat the representatives of an enormous corporation. On the other side, the lawyers for some 33 farmers seeking redress for the loss of use of an aquifer due to salt pollution. To win, the farmers' side had to assimilate vast amounts of information, recognize patterns, and effectively communicate those patterns to the Court. The Lisa personal computer sat at counsel table with the farmers. It was a symbol, a weapon, and a tool.

Background

By the time I got my Lisa computer at the end of December, I was desperate to get my hands on a machine that would let me manipulate data and get a feeling of control over the information. Prior to that time, our staff had invested thousands of hours meticulously coding over 4,000 documents and entering them into a mainframe computer. Although the printouts were helpful, the process was extremely rigid and unforgiving. I found significant new patterns beginning to emerge. However, it was frustrating that the task of reprogramming and reentering was arduous and time-consuming, and that it required the work of specialists.

My husband had mastered our Osborne computer after months of mumbled expletives from the basement. I knew that kind of time investment was not for me. Already putting in 70-hour weeks of preparation for this trial, I had neither the time nor the patience to learn a computer language. More than that, I needed a system I could count on under the pressure of trial since I was scheduled to examine a number of witnesses at the same time I was tracking the evidence.

The Trial Begins

By the time the trial began in March, we had worked out a number of applications which proved to be highly useful in a trial setting. One of the first steps was to outline a "battle plan" for the large number of tasks the office staff had to perform in preparation for trial. During the course of seven years of research, the file for this case had assumed gargantuan proportions. No room in our building was large enough to accommodate both the raw documents and the staff members working on various assignments.

Great chunks of time were devoured figuring out who had what part of the file, where they were, and how soon they would be finished with it. With **LisaProject** we easily produced a trial preparation chart which was posted in the central file headquarters we affectionately dubbed "The War Room". Updating and adjusting for changes was simple.

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(continued on page 8)

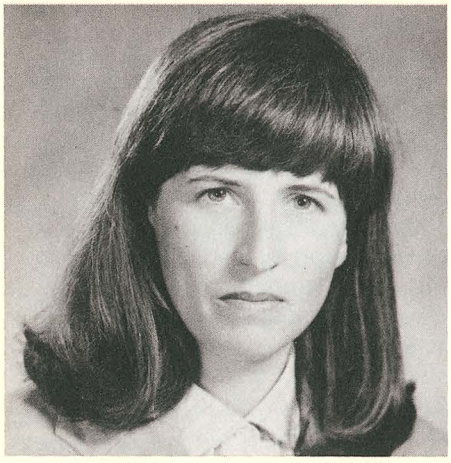
Lisa in the Courtroom
(continued from page 7)

The Verdict

Since the trial, we have received our upgrade to a **Lisa 2/10**, and we are delighted with its quiet nature and increased speed. My husband has sold his Osborne, and is talking about a Lisa. The judge handed down the decision, awarding $3.1 million to the farmers for their actual damages and $10 million punitive damages as incentive to clean the aquifer. We are also allowed to keep suing until the damages have ceased.

As for me, I'm no longer haunted by either the brinefield or computerphobia. I even used this article as an excuse to get to know **LisaWrite.** I can see a lot of changes down the road for the practice of law in this computer age. From now on, there will be a Lisa on my desk. Perhaps I will set up my home office in an "electronic cottage"* somewhere in the future.

*Idea taken from *The Third Wave* by Alvin Toffler, author of *Future Shock*.



About the author:
Deborah Carney graduated from Stanford in 1974 with a BA in Human Biology. A 1976 graduate of the University of Denver College of Law, with 7 years experience at Turner and Boisseau Charter in Texas, she currently works with Lutz and Oliver in Arvada, Colorado.

industry bulletin

New Support Programs for Apple Products

By Katie Povejsil

Apple is offering two new support programs:

- *The Self-Supporting Customer Program,* which provides the training and support necessary for a national account to become self-sufficient in terms of basic system and application support.
- *The Technical Support Program for Macintosh Developers,* which provides highly technical training and support for customers developing their own custom applications using the unique features of the Macintosh.

The Self-Supporting Customer Program

Apple is determined that every new Apple user be supported by a knowledgeable person who sets up the equipment and shows the new user how to get started. Apple's Self-Supporting Customer Program makes support available to customers by helping them become self-reliant.

Customers designate individuals from each of their self-supporting locations. Apple then trains these individuals to be Apple Support Coordinators (ASCs). These coordinators are responsible for setting up equipment, or for training others to set it up. They are also responsible for conducting in-person orientations for new users. This ensures that new users get off to the fastest start possible, avoiding the frustration that comes from not knowing what to do.

After the initial installation, the ASC serves as a resource person, helping users with questions and supplying on-going support. ASCs are encouraged to set up hotlines, newsletters, user's groups, training areas, and other means of communicating information to users.

ASC training classes are held regularly at locations throughout the U.S. The class on Macintosh and Lisa systems runs for three days; the class on the Apple *II* family runs for two days. All three products (Macintosh, Lisa, and the Apple *II*) are covered in a four-day course.

One year of support from Apple is also included in the price of the training. This means that ASCs can go to Apple to get answers to questions that can't be answered at their sites.

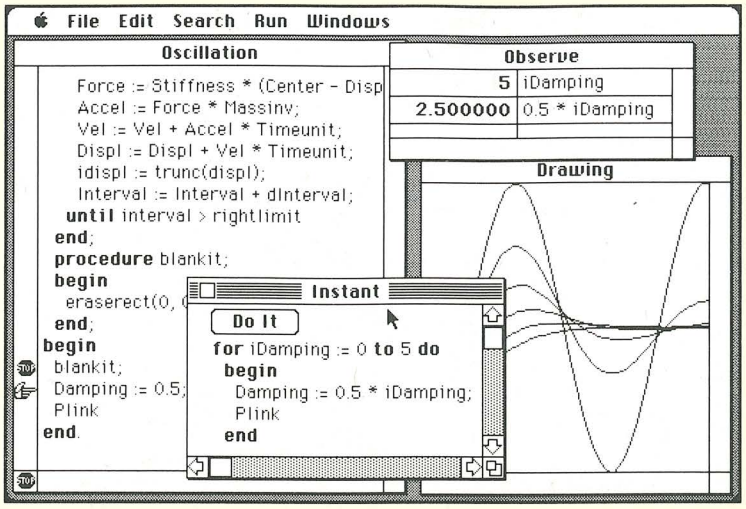
The Technical Support Program for Macintosh Developers

For customers who want to use the Macintosh environment to develop Macintosh applications, Apple is now offering both technical training and support.

The technical training is available in a one-day seminar for Pascal programmers and nonprogrammers alike, and in a two-day, in-depth, hands-on workshop for experienced Pascal programmers only. Both the seminar and the workshop explore the development process of a Macintosh application. They are offered consecutively so that they can be taken as a three-day course—to get the "big picture."

The Macintosh Technical Support Service is a six-month contract that provides access to an on-line database and electronic mail system, which subscribers can use to obtain answers to technical questions on the Macintosh Development System, the Pascal Workshop, *Inside Macintosh,* and the *Software Supplement.*

new products



Macintosh Pascal

Macintosh Pascal from Apple Computer offers an interpretive, highly interactive Pascal programming environment.

A full ANSI Standard Pascal with IEEE Standard Numerics, Macintosh Pascal provides complete access to QuickDraw graphics, the mouse, and other Macintosh features.

As many as five overlapping and adjustable windows allow you to watch your program in action. While one window displays your program, two other windows display the text and drawings it can produce.

Instant feedback, cut-and-paste editing, and separate program and output windows are just a few of the features that simplify program development and debugging.

AppleLine: For the Macintosh and Lisa

AppleLine provides an inexpensive way for Macintosh and Lisa personal computers to function in the 3270 family of IBM® networks.

With AppleLine, the Macintosh or the Lisa can be connected by coaxial cable to an IBM 3274 or 3276 Cluster Controller. Users can also emulate an IBM 3278 terminal, a display device that also attaches by means of coaxial cable.

These IBM controllers and terminals have been around for quite some time. As many as 2 million of them are installed in medium size and large companies worldwide, and most of the buildings that house them are wired with coaxial cable.

Since personal computers are now widely used, many companies need a 3270 coaxial attachment feature, and AppleLine provides Macintosh and Lisa with that capability.

AppleLine is a convenient connection. It requires no changes in the host system software, which means installation is not disruptive.

Users who are away from the office can simply plug an Apple modem into the Macintosh or Lisa serial port and dial into another modem connected to the AppleLine, accessing the mainframe computer within the company's IBM network.

Data communications software such as MacTerminal and Lisa Terminal, is required for a Macintosh or Lisa to use AppleLine.

MacTerminal: Data Communications for the Macintosh

MacTerminal is the first full-function data communications software program for the Macintosh.

Capable of transferring data between a Macintosh and other personal computers, minicomputers, and mainframes, MacTerminal also has the unique ability to exchange and interact with graphics.

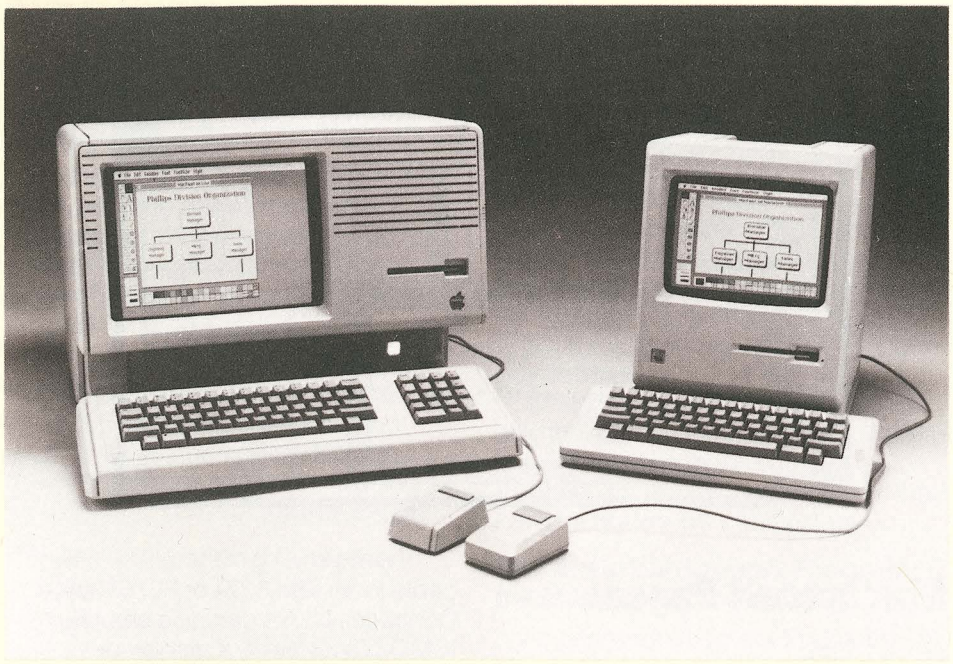
The program makes it possible to send and receive documents, system files, and applications between systems in a group of Macintosh and Lisa computers. It also enables the Macintosh to access electronic information services such as Dow Jones New/Retrieval®, The Source℠, and CompuServe®.

MacTerminal works with an Apple Modem (or other compatible modem) to provide VT100™, VT52™, and TTY terminal emulation. It works with AppleLine or the Apple Cluster Controller to provide IBM® 3278 (Model 2) terminal emulation. The VT100 emulation provides compatibility with DEC® minicomputers.

Since MacTerminal takes full advantage of the Macintosh's pull-down menus and mouse, the program is easy to use. There are even pull-down keypads for VT100 and 3278 terminals, eliminating the need to purchase extra hardware.

You can copy and paste data from another computer into other Macintosh applications. And the graphics capabilities of Macintosh are fully accessible as well.

New for Macintosh and Lisa



■ *ThinkTank*™ allows users to see their plans and ideas in outline form. Users focus on the highlights or zoom in to details. Compatible with many other applications, ThinkTank's outlines can also be loaded into a word processor for formatting. Living Videotext, 2432 Charleston Rd., Mountain View, CA 94303; 415/964-6300.

■ *The Home Accountant*—the complete financial record-keeping system for the home—allows monitoring of any number of checking accounts. It prints names and addresses directly onto checks, provides for 25 automatic monthly transactions, and keeps track of items needed for tax records. Monthly budget entries include assets, credit card liabilities, income/expense summaries, and budget/actuals listings, as well as transaction activity reports. Additionally, users may figure loans or the future value of monthly investments with a financial calculations module. Continental Software, 11223 South Hindry Ave., Los Angeles, CA 90045. 213/417-8031.

■ *MegaMerge,* a mail-merge program that handles MacWrite documents, allows the designing of form letters, printing of mailing lists, and addressing of envelopes. Long documents can be merged for printing as one file. Megahaus, 5703 Oberlin Drive, San Diego, CA 92121. 619/450-1230.

■ *Odesta Helix,* an interactive information system and relational database, makes use of windowing and icon-oriented menu capabilities. It features icon-defined relationships and calculations, as well as reports that can be customized by the user. Odesta, 3186 Doolittle Drive, Northbrook, IL 60062. 800/323-5423.

■ *Main Street Filer,* a filing system and report generator, handles up to 65,000 records. Files can contain as many as 36 fields with as many as 40 characters in each field. Four indexes per file permit data retrieval without a lot of sorting. Reports can be printed precisely as they appear on the screen. Reports in columnar or mail-list format, as well as labels, envelopes, and Rolodex cards, are all included on the print program. The mouse is used for all functions except data entry. Main Street Software, 1 Harbor Drive, Sausalito, CA 94965. 415/824-8757.

■ *CRTplus,* a decision support tool for financial institutions, improves the availability of product information and facilitates the cross-selling of financial products and services. Banks, savings and loan associations, and credit unions are able to perform a variety of calculations, which include certificate-of-deposit and early-withdrawal analyses, as well as analysis of IRA accounts, installment-loan alternatives, loan amortization, and taxable versus nontaxable investment strategies. Customers can be provided with personalized printouts that include information on various calculations and services. Aurora Systems, 2423 American Lane, Madison, WI 53704. 608/249-5875.

■ *Statpro: The Statistics and Graphics Database Workstation* is an integrated series of programs that makes the Lisa a professional research and management workstation. It features the ability to run multiple copies of Statpro in different windows, along with cut-and-paste capability between Statpro and other applications such as LisaWrite. Wadsworth Professional Software, Statler Office Bldg., 20 Park Plaza, Boston, MA 02116.

■ *Tekalike* is a mainframe graphics interface which turns the Lisa into a graphics terminal with any host computer supporting the Tektronix 401X family of terminals. In addition to allowing Tektronix commands to be saved and written to disk for off-line processing, the program permits saved commands to be redrawn, plotted, and zoomed. Mesa Graphics, Box 506, Los Alamos, NM 87544. 505/672-1998.

■ *Tax Time Saver,* new from P. Douglas & Associates, is a federal tax planner program that calculates regular tax, income averaging, alternative minimum tax, self-employment tax, marital deduction, and itemized deductions.

The following areas are automatically checked for excessive (therefore incorrect) entries: IRAs, charitable contributions, and investment credit.

The program automatically alerts the user to check eligibility for earned income credit, elderly credit, and excess self-employment. Designed to follow the 1040 form line for line, the program enables the user to input data from a prepared tax form in order to check it for accuracy. The program runs on the Apple *II* family of personal computers.

P. Douglas & Associates, Box 208, Kerkhoven, MN 56525. 612/599-4308.

UniPress Software

New from UniPress Software is a line of programs which run under their UniPlus+ version of UNIX™:

- *UNIX System V* provides a multiuser UniPlus+ operating system with C development and text processing tools.
- *UniCalc* is a spreadsheet that includes many logic and math functions, as well as extensive formatting.
- *Q-Calc,* another spreadsheet, provides sort/search capabilities and communicates with UNIX through pipes and filters.
- *Unify Database,* a fully relational database, is easily programmable and contains a simple query language.
- *Lex* is a menu-driven interactive word processor.
- *EMACS,* a full-screen multiwindow text editor, features built-in MLisp files and macros for extensibility.

UniPress Software, 1164 Raritan Ave., Highland Park, NJ 08904. 201/985-8000.

TOM Software

Also using the UniPlus+ operating system, TOM Software offers a set of business modules including accounting applications (A/R, A/P, Payroll, and General Ledger) and industry-specific applications (such as Public Accountant Business Management, Restaurant/Food Service Management Information, Property Management Business Information, and Not-For-Profit Operations Management).

TOM Software also includes Speed I, a software applications utility, and EZ Speed, a records management program. TOM Software, 127 S.W. 156th Street, Seattle, WA 98166. 206/246-7022.

R Systems

R-Word, a word processing program, also has mail-merge and math/spreadsheet capabilities. Foreground edits can be performed while a file is printing, and what you see on screen is what you get in the printout. R Systems, 11450 Pagemill Rd., Dallas, TX 75243. 214/343-9188.

Open Systems Accounting Software

The Software Fitness Program with its nine accounting modules from Open System are now available for the Lisa. The program requires XENIX™ and runs in a multiuser environment.

The modules include *Accounts Payable, Accounts Receivable, General Ledger, Inventory, Job Cost, Payroll, Purchase Order Processing, Sales Order Processing,* and *The Team Manager* which permits designing reports and formatting data from the other eight components of the Software Fitness Program.

Open Systems, 430 Oak Grove, Minneapolis, MN 55403. 612/870-3515.

Apropos Software

The Investment Planning Series from Apropos consists of five separate software programs that evaluate personal investment portfolios. Each program in the series runs on the Macintosh in conjunction with Microsoft Multiplan.

- *Stock-Portfolio Planner* keeps records: dividends, appreciation, and realized and unrealized gains from sale of stock. It also generates analyses to determine the profit potential of individual stocks.
- *Real Estate Investment Planner* produces a five-year analysis for a real estate tax-shelter investment.
- *Investment Portfolio* keeps records of investment earnings and appreciation, and generates a summary report.
- *Loan Planner* determines monthly payments on long-term loans, and produces a 15-year summary of interest and principal costs.
- *IRA vs. CD Planner* figures the difference between investing in an individual retirement account and a certificate of deposit.

Apropos Software, Inc., 64 Hillview Ave., Los Altos, CA 94022. 415/948-7227.

Professional Solutions Invites Authors

The editors of *Professional Solutions* invite you to submit case history and application articles on the use of Apple computers in your business organization, or industry.

Stories should be accompanied by a black and white photograph of the author and a brief description of the author's background. Please include other black and white illustrations—photos, graphs, diagrams—when possible.

Send the article to Barbara Blumenthal, Editor, *Professional Solutions,* 20525 Mariani Avenue, Cupertino, California 95014.

Lisa 7/7
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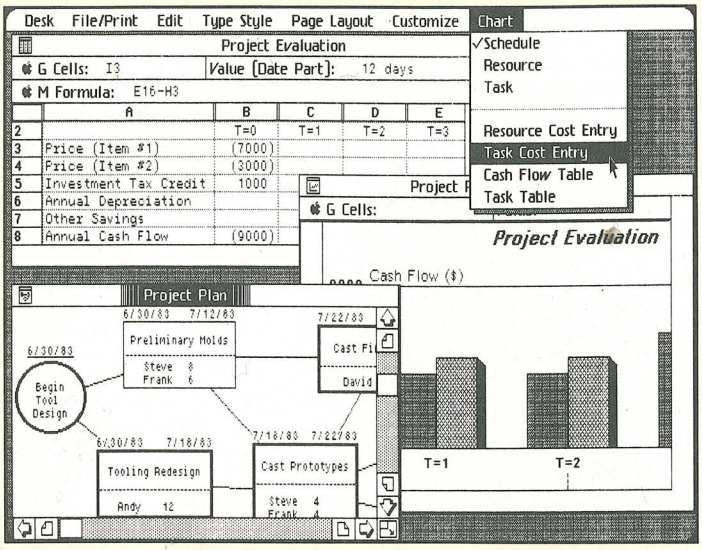

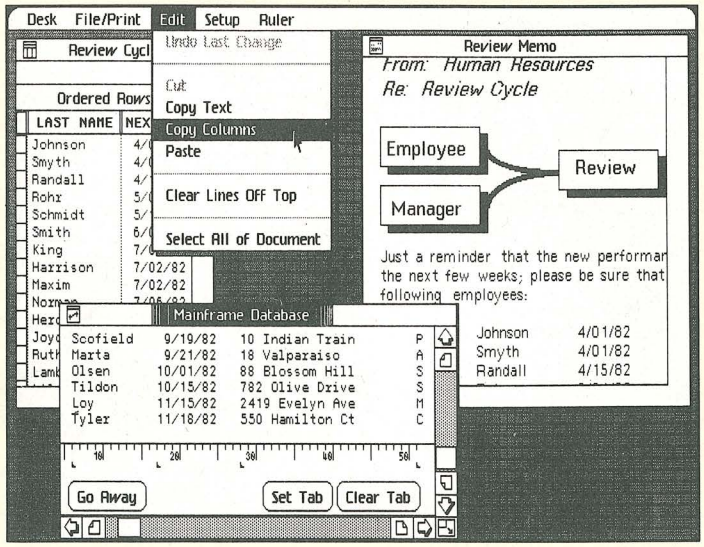

- *LisaWrite,* a word processor, now allows graphics to be merged with text; includes an 80,000-word spelling corrector (with room for 750 user-definable words); and supports color printing of graphics.
- *LisaCalc,* a spreadsheet, now calculates faster using natural order of evaluation, and includes statistical functions and internal rate of return.
- *LisaTerminal,* a data communications tool, allows communication with most mainframes and minicomputers, including IBM® machines. New features include enhanced cut-and-paste integration with other Lisa 7/7 functions, and automatic word wrap.
- *LisaList,* a list manager, performs search and sort functions, and reorganizes information into useful formats. It permits movement of information to and from other Lisa functions.
- *LisaGraph* features new choices for business graphics: stacked bar graphs, area charts, solid bar graphs, and clustered bar graphs. It can plot simple linear regression and supports color printing.
- *LisaDraw,* a structured graphics tool, now offers a reduce-to-fit function as well as a selection from an eight-color palette, and a selection of fill-patterns as well. It allows rotation of text and objects, and supports color printing.

Training time is greatly reduced by Lisa 7/7. Since the outstanding features are consistent from one program to the next, refresher courses are not necessary. Disk shuffling is reduced because quitting and saving is not required in order to move data from one application to another.

The simple Lisa commands of "cut" and "paste" govern the combining of words, numbers, charts, and graphs. It is also possible to work with several different documents at once. And print queuing allows multiple documents to be printed automatically while the user continues working on the Lisa.

In short, the unwieldy process of working with different applications has been simplified—with people and their work habits in mind.

Designed for either the Lisa 2/5 or Lisa 2/10 systems, Lisa 7/7 does require a hard disk and one megabyte of internal memory.

Lisa users can upgrade Lisa Office System software to the Lisa 7/7. The upgrade includes a new operating system, all seven functions, and new manuals.

The 512K Macintosh
(continued from page 1)

such as Lotus Development Corporation.

Included with the Macintosh 512K (as well as with the 128K model) are MacWrite for word processing and MacPaint for free-form graphics.

With a 512K Memory Expansion Kit, a Macintosh 128K owner can replace the 128K digital board, expanding the system to the larger capacity.

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